

Tuesday, December 09, 2014 7:15:55 AM

127124

Ship JAN 18

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Fwd Crosstube w/ Peg Steps (OEM Replacement)

Start Date: 12/9/2014 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 12/9/2014 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MCS Date: 14-12-09 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other _____ _____ _____ _____
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Work Order ID 127124

Tuesday, December 09, 2014 7:15:56 AM

127124

Page 2

Item ID: D119-796-101

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Fwd Crosstube w/ Peg Steps (OEM Replacement)

Stop ***NS2***Start Date: 12/9/2014 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 12/9/2014 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D119-796-101 Location: <u>Sld</u>								
140	QC21 - Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

(1x)

DAS
46

9-00

APR 21 2015

MLJ 15-04-21

HS-4-1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Tuesday, December 09, 2014 7:15:58 AM

Page 1

Work Order ID: 127124

127124

Parent Item: D119-796-101

D119-796-101

Parent Item Name: Fwd Crosstube w/ Peg Steps (OEM Replacement)

Start Date: 12/9/2014

Required Date: 12/9/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 14-09-05 DD VERF:JLM IPP REV:B
14.10.22 AS PER PA1 DD VERF:JLM IPP REV:C 14.11.19
AS PER IIN REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status																								
D119-796-151		Manufactured	No				Each	0.0000		1			DAS 28 9-89																								
D119-796-151		46							**	B131311																											
Fwd Crosstube, STD w/ Peg Steps (MKII)		9-89																																			
AN5C32A		Purchased	No				Each	39.0000		4																											
AN5C32A	DAS 46 9-89								**	131150			DAS 6 9-89																								
BOLT													DAS 28 9-89																								
<table><tr><th>Location</th><th>Loc Qty</th><th>Loc Code</th></tr><tr><td>FG</td><td>4</td><td></td></tr><tr><td>18918</td><td>4</td><td></td></tr><tr><td>Return2014</td><td>2</td><td></td></tr><tr><td>123523</td><td>2</td><td></td></tr><tr><td>ST336</td><td>33</td><td></td></tr><tr><td>m126007</td><td>7</td><td></td></tr><tr><td>m130298</td><td>26</td><td></td></tr></table>														Location	Loc Qty	Loc Code	FG	4		18918	4		Return2014	2		123523	2		ST336	33		m126007	7		m130298	26	
Location	Loc Qty	Loc Code																																			
FG	4																																				
18918	4																																				
Return2014	2																																				
123523	2																																				
ST336	33																																				
m126007	7																																				
m130298	26																																				
AN5C34A		Purchased	No				Each	37.0000		4																											
AN5C34A									**																												
Bolt																																					
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Location	Loc Qty	Loc Code																																			
FG	2																																				
18918	2																																				
ST286A	19																																				
m130033	19																																				
ST336	16																																				
m130485	16																																				

MS21250-05048

4x

DAS
46
9-89

131605

DAS
6
9-89

DAS
28
9-89

MS21250-05048

DAS
46
9-89

131605

DAS
6
9-89
DAS
28
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Tuesday, December 09, 2014 7:15:58 AM

Page 2

Work Order ID: 127124

127124

Parent Item: D119-796-101

D119-796-101

Parent Item Name: Fwd Crosstube w/ Peg Steps (OEM Replacement)

Start Date: 12/9/2014

Required Date: 12/9/2014

Start Qty: 1.00

Required Qty: 1.00

AN5C7A Purchased No

Each 51.0000

12

AN5C7A
BOLT

DAS
46
9-89

131139

Location

Loc Qty

Loc Code

FG

2

19185

2

ST338

49

19185

49

DAS
6
9-89
DAS
28
9-89

MS21043-5

Purchased No

Each 144.0000

4

MS21043-5
Nut

DAS
46
9-89

131317

Location

Loc Qty

Loc Code

FG

20

101418

20

ST304

124

116548

88

121584

11

m129795

25

DAS
6
9-89
DAS
28
9-89

NAS1149C0563R

Purchased No

Each 473.0000

20

NAS1149C0563R
Washer

DAS
46
9-89

Location

Loc Qty

Loc Code

ST260a

400

m131026

400

ST271

73

m125928

73

DAS
6
9-89
DAS
28
9-89

Tuesday, December 09, 2014 7:15:59 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DART AEROSPACE LTD.

ICA-D119-796

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32.7 PARTS LISTS

32.7.1 STANDARD GEAR CROSSTUBES

Item	-101	-201	-103	-203	-141	-241	-151	-251	Part Number	Description
	X								D119-796-101	FWD CROSSTUBE INSTALLATION WITH PEG STEPS
		X							D119-796-201	AFT CROSSTUBE INSTALLATION WITH PEG STEPS
			X						D119-796-103	FWD CROSSTUBE INSTALLATION W/O PEG STEPS
				X					D119-796-203	AFT CROSSTUBE INSTALLATION W/O PEG STEPS
			1		X		1		D119-796-141	CROSSTUBE INSTALLATION, STANDARD FWD, W/O PEG STEPS
				1		X		1	D119-796-241	CROSSTUBE INSTALLATION, STANDARD AFT, W/O PEG STEPS
	1						X		D119-796-151	CROSSTUBE INSTALLATION, STANDARD FWD, WITH PEG STEPS
		1						X	D119-796-251	CROSSTUBE INSTALLATION, STANDARD AFT, WITH PEG STEPS
1					4	4			D2873-043	RADIUS BLOCK
2						1			D5122-1	CENTER SUPPORT
3						6			D5123-1	CLAMP CUSHION
4					4		4	4	D5123-3	CLAMP CUSHION
5						2			D5123-5	CLAMP CUSHION
6					2				D5124-1	FWD SUPPORT
7						1			D5134-041	DAMPER SUPPORT ASSY, LH
8						1			D5134-042	DAMPER SUPPORT ASSY, RH
9						1			D5136-1	CONTACT PAD, LH
10						1			D5136-2	CONTACT PAD, RH
11							2		D5149-041	FWD STEP ASSY
12								2	D5149-043	AFT STEP ASSY
13					2				D5152-041	FWD POST MOUNT ASSY
14						2			D5152-043	AFT POST MOUNT ASSY
15							4		MS21920-22	CLAMP
16					4				MS21920-24	CLAMP
17						6		4	MS21920-25	CLAMP
18						2			MS21920-28	CLAMP
19	4	4	4	4					AN5C32A	BOLT
20	4	4	4	4					MS21250-05048	BOLT
21	12	12	12	12					AN5C7A	BOLT
22	4	4	4	4					MS21043-5	NUT
23	20	20	20	20					NAS1149C0563R	WASHER

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Revision: 1

32-00-00

Work Order ID 127124

Tuesday, December 09, 2014 7:15:55 AM

127124

Ship JAN 18

Page 1

Item ID: D119-796-101 Accept ***N1900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Fwd Crosstube w/ Peg Steps (OEM Replacement)
 Start Date: 12/9/2014 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 12/9/2014 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: 14-12-09 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN-D119-796	B								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D119-796-101 CHG001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

chg 003

MCS 150421

DAS
6
9-89

APR 17 2015

Change Record

PAGE 1 OF 1

Part Number: D119-796-101

Description: FWD CROSSTUBE INSTALLATION WITH PEG STEPS

[illegible]